

Git Assignment

Q 1. a. Create new folder

Ans : **Mkdir git_folder**

Cd git_folder

```
lalba@LAPTOP-PHMV5VKC MINGW64 ~/shell (master)
$ mkdir git_folder

lalba@LAPTOP-PHMV5VKC MINGW64 ~/shell (master)
$ cd git_folder
```

b. b. Put the following file in the folder

.code.txt

.log.txt

.output.txt

Using **touch** command we can make this file

```
lalba@LAPTOP-PHMV5VKC MINGW64 ~/shell/git_folder (master)
$ touch code.txt

lalba@LAPTOP-PHMV5VKC MINGW64 ~/shell/git_folder (master)
$ touch log.txt

lalba@LAPTOP-PHMV5VKC MINGW64 ~/shell/git_folder (master)
$ touch output.txt

lalba@LAPTOP-PHMV5VKC MINGW64 ~/shell/git_folder (master)
$ ls
code.txt  log.txt  output.txt
```

C. Stage the code.txt and output.txt file

For staging we will use **git add file_name command**

step 1: Git add code.txt

step 2: Git add output.txt

Step 3: Git status

```
lalba@LAPTOP-PHMY5VKC MINGW64 ~/shell/git_folder (master)
$ git init
Initialized empty Git repository in C:/Users/lalba/shell/git_folder/.git/

lalba@LAPTOP-PHMY5VKC MINGW64 ~/shell/git_folder (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        code.txt
        log.txt
        output.txt

nothing added to commit but untracked files present (use "git add" to track)

lalba@LAPTOP-PHMY5VKC MINGW64 ~/shell/git_folder (master)
$ git add code.txt

lalba@LAPTOP-PHMY5VKC MINGW64 ~/shell/git_folder (master)
$ git add output.txt

lalba@LAPTOP-PHMY5VKC MINGW64 ~/shell/git_folder (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   code.txt
        new file:   output.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        log.txt

lalba@LAPTOP-PHMY5VKC MINGW64 ~/shell/git_folder (master)
$
```

d. commit them

Using the below command we can commit the file

`git commit -m "add comment"`

E. And finally push them to git

Add the origin using below command to push the file

git remote add origin https://github.com/Lal44/git_folder.git

push the file using below command

git push origin master

```
lalba@LAPTOP-PHMOV5VKC MINGW64 ~/shell/git_folder (master)
$ git commit -m "commit the code.txt and output.txt file"
[master (root-commit) fd65dff] commit the code.txt and output.txt file
2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 code.txt
create mode 100644 output.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/shell/git_folder (master)
$ git push main origin
error: src refspec origin does not match any
error: failed to push some refs to 'main'

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/shell/git_folder (master)
$ git remote add origin https://github.com/Lal44/git_folder.git

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/shell/git_folder (master)
$ git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 234 bytes | 234.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Lal44/git_folder.git
 * [new branch]      master -> master
```

2. . Please share the commands for the above point

Step1: git init

Step2: git add file_name

Step3: git commit -m "add commit"

Step4: git push origin master

Q2. Task to Be Performed:

1. Create a Git working directory with feature1.txt and feature2.txt in the master branch

We have created two working directory **feature1** and **feature2**

```
lalba@LAPTOP-PHMOV5VKC MINGW64 ~ (master)
$ mkdir myrepo

lalba@LAPTOP-PHMOV5VKC MINGW64 ~ (master)
$ cd myrepo

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ ls

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git init
Initialized empty Git repository in C:/Users/lalba/myrepo/.git/

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ touch feature{1..2}.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ ls
feature1.txt  feature2.txt
```

2. Create 3 branches develop, feature1 and feature2

Ans:

Step1 : git checkout master

Step2 : git checkout -b devops

Step3 : git checkout -b feature1

Step4 : git checkout -b feature2

```

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git branch
  devops
  feature1
  feature2
* master

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$

```

Q 3. In develop branch create develop.txt, do not stage or commit it

Step 1: Git checkout -b devops

Step 2: touch devops.txt

Step 3: git add devops.txt

Step 4: git stash

Step 5: git stash list (to verify the file is stash or not)

```

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ touch devops.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ ls
devops.txt  feature1.txt  feature2.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git add devops.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git status
On branch devops
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   devops.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git stash
Saved working directory and index state WIP on devops: 567d623 add feature1 and featur2

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git stash list
fatal: subcommand wasn't specified; 'push' can't be assumed due to unexpected token 'list'

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git stash list
stash@{0}: WIP on devops: 567d623 add feature1 and featur2

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$

```

Q 4.Stash this file and check out to feature1 branch

Ans : step 1: git stash

Step 2: git checkout feature1

```
talba@LAPTOP-PHMV5VKC MINGW64 ~/myrepo (devops)
$ git checkout feature1
Switched to branch 'feature1'
```

Q 5.Create new.txt file in feature1 branch, stage and commit

This file

Ans : step 1: git checkout feature1

Step 2: touch new.txt

Step 3: git add new.txt

Step 4: git commit -m "file new.txt stage"

```
talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (feature1)
$ touch new.txt

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (feature1)
$ ls
feature1.txt  feature2.txt  new.txt

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (feature1)
$ git add new.txt

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (feature1)
$ git commit -m "file stash"
[feature1 c5a5677] file stash
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 new.txt

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (feature1)
$ git status
On branch feature1
nothing to commit, working tree clean

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (feature1)
$ .....
```

Q 6: Checkout the develop, unstash this file and commit

Ans : Step 1: git checkout devops

Step 2: git stash pop

Step 3: git commit -m "comment"

```
talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (feature1)
$ git checkout devops
Switched to branch 'devops'

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git stash pop
On branch devops
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   devops.txt

Dropped refs/stash@{0} (473a933cb226e0c6a290b86c6ce9750169b43cb3)

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ ls
devops.txt  feature1.txt  feature2.txt

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git commit -m "stash pop"
[devops d4e37f6] stash pop
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 devops.txt

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$
```

Q 7. Please submit all the Git commands used to do the above step

Ans:

1. Create a Git working directory and commit files to master branch

mkdir myrepo

cd myrepo

git init

touch feature1.txt feature2.txt

echo "Content for feature1" > feature1.txt

echo "Content for feature2" > feature2.txt

git add feature1.txt feature2.txt


```
git commit -m "Add feature1.txt and feature2.txt to the master branch"
```

2. Create branches

```
git checkout -b develop
```

```
git checkout master
```

```
git checkout -b feature1
```

```
git checkout master
```

```
git checkout -b feature2
```

3. In develop branch, create develop.txt (do not stage or commit)

```
git checkout develop
```

```
touch develop.txt
```

Do not stage or commit

4. Stash the file and switch to feature1 branch

```
git stash push -m "Stash develop.txt"
```

```
git checkout feature1
```

5. Create, stage, and commit new.txt in feature1 branch

```
touch new.txt
```

```
git add new.txt
```

```
git commit -m "Add new.txt in feature1 branch"
```

6. Checkout to develop, unstash develop.txt, and commit

```
git checkout develop
```

```
git stash pop
```

```
git add develop.txt
```

```
git commit -m "Add develop.txt to develop branch"
```

Q 3. Task to Be Performed:

1. Create a Git working directory, with the following branches:

Develop

F1

f2

Ans :

Step 1: mkdir myrepo

Step2: git inti

Step3: git checkout -b devops

Step4: git checkout -b f1

Step5: git checkout -b f2

Step6: git status

```

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ ls
main.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git checkout -b devops
Switched to a new branch 'devops'

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git branch
* devops
  master

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git checkout master
Switched to branch 'master'

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git checkout -b f1
Switched to a new branch 'f1'

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (f1)
$ git checkout master
Switched to branch 'master'

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git checkout -b f2
Switched to a new branch 'f2'

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (f2)
$ git branch
  devops
  f1
* f2
  master

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (f2)
$

```

3. In the master branch, commit main.txt file

Ans:

Step 1: touch main.txt

Step 2: git add main.txt

Step 3: git commit -m "comment"

Step 4: git status

```

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ touch main.txt

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ ls
main.txt

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git add main.txt

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git status
On branch devops

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   main.txt

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git commit -m "comment"
[devops (root-commit) 57db4d5] comment
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 main.txt

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git status
On branch devops
nothing to commit, working tree clean

talba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$

```

4. Put develop.txt in develop branch, f1.txt and f2.txt in f1 and f2 respectively

Ans:

Step1: git checkout devops

Step2: touch devops.txt

Step3: git checkout f1

Step4: touch f1.txt

Step5: git checkout f2

Step6: touch f2.txt

```
lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (f2)
$ git checkout devops
Switched to branch 'devops'

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ touch devops.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ ls
devops.txt  main.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (devops)
$ git checkout f1
Switched to branch 'f1'

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (f1)
$ touch f1.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (f1)
$ ls
devops.txt  f1.txt  main.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (f1)
$ git checkout f2
Switched to branch 'f2'

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (f2)
$ touch f2.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (f2)
$ ls
devops.txt  f1.txt  f2.txt  main.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (f2)
$ .....
```

5. Push all these branches to GitHub

Ans :

Add GitHub repository as remote

git remote add origin <your-repo-url>

Push master branch

git push -u origin master

Push develop branch

git push -u origin develop

Push F1 branch

git push -u origin F1

Push f2 branch

git push -u origin f2

```

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git push -u origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 205 bytes | 205.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Lal44/myrepo.git
* [new branch]      master -> master
branch 'master' set up to track 'origin/master'.

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git push -u origin devops
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 237 bytes | 237.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'devops' on GitHub by visiting:
remote:   https://github.com/Lal44/myrepo/pull/new/devops
remote:
To https://github.com/Lal44/myrepo.git
* [new branch]      devops -> devops
branch 'devops' set up to track 'origin/devops'.

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git push -u origin f1
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 228 bytes | 228.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'f1' on GitHub by visiting:
remote:   https://github.com/Lal44/myrepo/pull/new/f1
remote:
To https://github.com/Lal44/myrepo.git
* [new branch]      f1 -> f1
branch 'f1' set up to track 'origin/f1'.

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git push -u origin f2
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 229 bytes | 229.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'f2' on GitHub by visiting:
remote:   https://github.com/Lal44/myrepo/pull/new/f2
remote:
To https://github.com/Lal44/myrepo.git
* [new branch]      f2 -> f2
branch 'f2' set up to track 'origin/f2'.

```

6. On local delete f2 branch

Ans :

git branch -d f2

```
lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git branch -d f2
warning: deleting branch 'f2' that has been merged to
        'refs/remotes/origin/f2', but not yet merged to HEAD
Deleted branch f2 (was 18e962e).

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git branch
  devops
  f1
* master
```

7. Delete the same branch on GitHub as well

Ans:

Git push origin --delete f2

```
lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git push origin --delete f2
To https://github.com/Lal44/myrepo.git
- [deleted]          f2

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$ git branch
  devops
  f1
* master

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/myrepo (master)
$
```

Overview Yours Active Stale All				
🔍 Search branches...				
Default				
Branch	Updated	Check status	Behind Ahead	Pull request
master	8 minutes ago		Default	...
Your branches				
Branch	Updated	Check status	Behind Ahead	Pull request
f1	7 minutes ago		0 1	...
devops	7 minutes ago		0 1	...
Active branches				
Branch	Updated	Check status	Behind Ahead	Pull request
f1	7 minutes ago		0 1	...
devops	7 minutes ago		0 1	...

4 Task to Be Performed:

1. Put master.txt on master branch, stage and commit

Ans:

Step1: mkdir project

Step2: git init

Step3: touch master.txt

Step4: git add master.txt

Step5: git commit -m "comment"

```
lalba@LAPTOP-PHMOV5VKC MINGW64 ~ (master)
$ mkdir project

lalba@LAPTOP-PHMOV5VKC MINGW64 ~ (master)
$ cd project

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/project (master)
$ ls

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/project (master)
$ git init
Initialized empty Git repository in C:/Users/lalba/project/.git/

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/project (master)
$ touch master.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/project (master)
$ git add master.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/project (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   master.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/project (master)
$ git commit -m "changed"
[master (root-commit) fc353b5] changed
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 master.txt

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/project (master)
$
```

2. Create 3 branches: public 1, public 2 and private

Ans:

```
git checkout -b public1
```

```
# Switch back to master
```

```
git checkout master
```

```
# Create and switch to the public2 branch
```

```
git checkout -b public2
```

```
# Switch back to master
```

```
git checkout master
```

```
# Create and switch to the private branch
```

```
git checkout -b private
```

3. Put public1.txt on public 1 branch, stage and commit

Ans:

```
# Switch to the public1 branch
```

```
git checkout public1
```

```
# Create public1.txt file
```

```
touch public1.txt
```

```
echo "Content for public1.txt" > public1.txt
```

```
# Stage and commit public1.txt
```

```
git add public1.txt
```

```
git commit -m "Add public1.txt to public1 branch"
```

4. Merge public 1 on master branch

Ans:

```
# Switch to master branch
```

```
git checkout master
```

```
# Merge public1 branch into master
```

```
git merge public1
```

5. Merge public 2 on master branch

Ans:

```
# Switch to public2 branch
```

```
git checkout public2
```

```
# Merge public2 branch into master
```

```
git checkout master
```

```
git merge public2
```

6. Edit master.txt on private branch, stage and commit

Ans:

```
# Switch to private branch
```

```
git checkout private
```

```
# Edit master.txt file
```

```
echo "Updated content on private branch" >  
master.txt
```

```
# Stage and commit the change
git add master.txt
git commit -m "Update master.txt on private branch"
```

7. Now update branch public 1 and public 2 with new master code in private

Ans:

```
# Switch to public1 branch
git checkout public1
```

```
# Merge master branch (which includes updates from
private) into public1
git merge master
```

```
# Switch to public2 branch
git checkout public2
```

```
# Merge master branch (which includes updates from
private) into public2
git merge master
```

8. Also update new master code on master

Ans:

```
# Switch to master branch
git checkout master
```

```
# Merge private branch into master
git merge private
```

9. Finally update all the code on the private branch

Ans:

Switch to private branch

git checkout private

Merge master branch into private to ensure it has the latest changes

git merge master

5 Tasks to Be Performed:

1. Create a Git Flow workflow architecture on Git

Ans:

Git Flow is a branching model that defines a set of branches for managing development. Here's the architecture:

master: Production-ready branch. Code here should always be stable and deployable.

develop: Integration branch where features are merged before a release.

feature/*: Branches for developing new features, created off of develop.

release/*: Branches for preparing new releases, created off of develop.

hotfix/*: Branches for urgent fixes, created off of master.

2. Create all the required branches

Ans:

`git flow init`

Create the develop branch if it doesn't exist:

`git checkout -b develop`

`git push -u origin develop`

Create a feature/* branch:

`git flow feature start my-feature`

Create a release/* branch (optional, when preparing for a release):

`git flow release start 1.0.0`

Create a hotfix/* branch (optional, for urgent fixes):

`git flow hotfix start urgent-fix`

```
lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (main)
$ git branch
* main

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (main)
$ git flow init

Which branch should be used for bringing forth production releases?
- main
Branch name for production releases: [main] main
Branch name for "next release" development: [develop] development

How to name your supporting branch prefixes?
Feature branches? [feature/]
Bugfix branches? [bugfix/]
Release branches? [release/]
Hotfix branches? [hotfix/]
Support branches? [support/]
Version tag prefix? []
Hooks and filters directory? [C:/Users/lalba/lalbabu/gitflow-on-github/.git/hooks]

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (development)
$ ls
README.md

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (development)
$ git push origin development
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'development' on GitHub by visiting:
remote:   https://github.com/Lal44/gitflow-on-github/pull/new/development
remote:
To https://github.com/Lal44/gitflow-on-github.git
 * [new branch]      development -> development

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (development)
$ git branch
* development
  main
```

```

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (feature/my-feature)
$ git branch
  development
* feature/my-feature
  main

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (feature/my-feature)
$ git flow release start 1.0.0
Switched to a new branch 'release/1.0.0'

Summary of actions:
- A new branch 'release/1.0.0' was created, based on 'development'
- You are now on branch 'release/1.0.0'

Follow-up actions:
- Bump the version number now!
- Start committing last-minute fixes in preparing your release
- When done, run:

    git flow release finish '1.0.0'

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (release/1.0.0)
$ git flow hotfix start urgent-fix
Switched to a new branch 'hotfix/urgent-fix'

Summary of actions:
- A new branch 'hotfix/urgent-fix' was created, based on 'main'
- You are now on branch 'hotfix/urgent-fix'

Follow-up actions:
- Start committing your hot fixes
- Bump the version number now!
- When done, run:

    git flow hotfix finish 'urgent-fix'

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (hotfix/urgent-fix)
$ git branch -a
  development
  feature/my-feature
* hotfix/urgent-fix
  main
  release/1.0.0
remotes/origin/HEAD -> origin/main
remotes/origin/development
remotes/origin/main

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (hotfix/urgent-fix)
$

```

4.starting from feature branch, push the branch to the master, following the architecture

Ans:

Step1: git checkout -b feature/my-feature

Step2: echo "hello feature_branch" >> feature.txt

Step3: git add feature.txt

Step4: git commit -m "feature-branch modified"

Step4:once task complete in feature branch we will move to development branch using below command

git flow feature finish my-feature

```
lalba@LAPTOP-PHNV5VKC MINGW64 ~/lalbabu/gitflow-on-github (hotfix/urgent-fix)
$ git checkout feature/my-feature
Switched to branch 'feature/my-feature'

lalba@LAPTOP-PHNV5VKC MINGW64 ~/lalbabu/gitflow-on-github (feature/my-feature)
$ echo "hello feature_branch" >> feature_branch.txt

lalba@LAPTOP-PHNV5VKC MINGW64 ~/lalbabu/gitflow-on-github (feature/my-feature)
$ ls
README.md  feature_branch.txt

lalba@LAPTOP-PHNV5VKC MINGW64 ~/lalbabu/gitflow-on-github (feature/my-feature)
$ git add feature_branch.txt
warning: in the working copy of 'feature_branch.txt', LF will be replaced by CRLF the next time you commit

lalba@LAPTOP-PHNV5VKC MINGW64 ~/lalbabu/gitflow-on-github (feature/my-feature)
$ git commit -m "feature branch add"
[feature/my-feature 2b501bf] feature branch add
1 file changed, 1 insertion(+)
create mode 100644 feature_branch.txt

lalba@LAPTOP-PHNV5VKC MINGW64 ~/lalbabu/gitflow-on-github (feature/my-feature)
$ git flow feature finish my-feature
Switched to branch 'development'
Updating f0acbc9..2b501bf
Fast-forward
 feature_branch.txt | 1 +
1 file changed, 1 insertion(+)
create mode 100644 feature_branch.txt
Deleted branch feature/my-feature (was 2b501bf).

Summary of actions:
- The feature branch 'feature/my-feature' was merged into 'development'
- Feature branch 'feature/my-feature' has been locally deleted
- You are now on branch 'development'

lalba@LAPTOP-PHNV5VKC MINGW64 ~/lalbabu/gitflow-on-github (development)
$ !
```

After that we will push the above change in feature-branch file to development branch using below command.

git push --set-upstream origin development or

git push origin

Prepare for a Release: Create a release branch to prepare for merging into master:

git flow release start 1.0.0

```
lalba@LAPTOP-PHMOV5VKC MINGW64 ~/lalbabu/gitflow-on-github (development)
$ git flow release start 1.0.0
Switched to a new branch 'release/1.0.0'

Summary of actions:
- A new branch 'release/1.0.0' was created, based on 'development'
- You are now on branch 'release/1.0.0'

Follow-up actions:
- Bump the version number now!
- Start committing last-minute fixes in preparing your release
- When done, run:

    git flow release finish '1.0.0'

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/lalbabu/gitflow-on-github (release/1.0.0)
$ git branch
  development
  hotfix/urgent-fix
  main
* release/1.0.0

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/lalbabu/gitflow-on-github (release/1.0.0)
$ git push origin
fatal: The current branch release/1.0.0 has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream origin release/1.0.0

To have this happen automatically for branches without a tracking
upstream, see 'push.autoSetupRemote' in 'git help config'.

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/lalbabu/gitflow-on-github (release/1.0.0)
$ git push --set-upstream origin release/1.0.0
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'release/1.0.0' on GitHub by visiting:
remote:   https://github.com/Lal44/gitflow-on-github/pull/new/release/1.0.0
remote:
To https://github.com/Lal44/gitflow-on-github.git
 * [new branch]      release/1.0.0 -> release/1.0.0
branch 'release/1.0.0' set up to track 'origin/release/1.0.0'.

lalba@LAPTOP-PHMOV5VKC MINGW64 ~/lalbabu/gitflow-on-github (release/1.0.0)
```

```

lalba@LAPTOP-PHMY5VKC MINGW64 ~/lalbabu/gitflow-on-github (release/1.0.0)
$ ls
README.md  feature_branch.txt

lalba@LAPTOP-PHMY5VKC MINGW64 ~/lalbabu/gitflow-on-github (release/1.0.0)
$ echo "this is fix in release branch" >> release-fix.txt

lalba@LAPTOP-PHMY5VKC MINGW64 ~/lalbabu/gitflow-on-github (release/1.0.0)
$ git add release-fix.txt
warning: in the working copy of 'release-fix.txt', LF will be replaced by CRLF the next time Git touches it

lalba@LAPTOP-PHMY5VKC MINGW64 ~/lalbabu/gitflow-on-github (release/1.0.0)
$ git commit -m "release-fix"
[release/1.0.0 d3d6d20] release-fix
1 file changed, 1 insertion(+)
create mode 100644 release-fix.txt

lalba@LAPTOP-PHMY5VKC MINGW64 ~/lalbabu/gitflow-on-github (release/1.0.0)
$ git push origin
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 347 bytes | 347.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Lal44/gitflow-on-github.git
2b501bf..d3d6d20  release/1.0.0 -> release/1.0.0

lalba@LAPTOP-PHMY5VKC MINGW64 ~/lalbabu/gitflow-on-github (release/1.0.0)
$

```

The screenshot shows the GitHub web interface for the repository 'Lal44/gitflow-on-github'. The current branch is 'release/1.0.0', which is 2 commits ahead of 'main'. The commit history table shows the following commits:

Commit Hash	Author	Message	Time
d3d6d20	Lal44	release-fix	1 minute ago
	Lal44	feature branch add	21 minutes ago
	Lal44	Initial commit	1 hour ago

Finish the Release Branch: Complete the release and merge it into master and development:

git flow release finish '1.0.0'

4. Push an urgent.txt on master using hotfix

Start a hotfix branch:

```
git flow hotfix start urgent-fix
```

Add the urgent.txt file:

```
echo "Urgent fix content" > urgent.txt
```

```
git add urgent.txt
```

```
git commit -m "Add urgent.txt for hotfix"
```

Finish the hotfix branch:

```
git flow hotfix finish 'urgent-fix'
```

This merges the hotfix changes into master and develop.

Push changes to master:

git push origin master

git push origin develop

```
lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (main)
$ git checkout hotfix/urgent-fix
Switched to branch 'hotfix/urgent-fix'

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (hotfix/urgent-fix)
$ echo "Urgent fix content" > urgent.txt

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (hotfix/urgent-fix)
$ git add urgent.txt
warning: in the working copy of 'urgent.txt', LF will be replaced by CRLF the next time Git touches it

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (hotfix/urgent-fix)
$ git commit -m "Add urgent.txt for hotfix"
[hotfix/urgent-fix 38953c0] Add urgent.txt for hotfix
 1 file changed, 1 insertion(+)
 create mode 100644 urgent.txt

lalba@LAPTOP-PHMV5VKC MINGW64 ~/lalbabu/gitflow-on-github (hotfix/urgent-fix)
$ git flow hotfix finish 'urgent-fix'
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
Merge made by the 'ort' strategy.
 urgent.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 urgent.txt
Switched to branch 'development'
Your branch is up to date with 'origin/development'.
Merge made by the 'ort' strategy.
 release-fix.txt | 1 +
 urgent.txt      | 1 +
 2 files changed, 2 insertions(+)
 create mode 100644 release-fix.txt
 create mode 100644 urgent.txt
Deleted branch hotfix/urgent-fix (was 38953c0).

Summary of actions:
- Hotfix branch 'hotfix/urgent-fix' has been merged into 'main'
- The hotfix was tagged 'urgent-fix'
- Hotfix tag 'urgent-fix' has been back-merged into 'development'
- Hotfix branch 'hotfix/urgent-fix' has been locally deleted
- You are now on branch 'development'
```

```


lalba@LAPTOP-PHMY5VKC MINGW64 ~/lalbabu/gitflow-on-github (development)
$ git push origin
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 8 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (6/6), 778 bytes | 778.00 KiB/s, done.
Total 6 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Lal44/gitflow-on-github.git
    2b501bf..d98478d  development -> development




lalba@LAPTOP-PHMY5VKC MINGW64 ~/lalbabu/gitflow-on-github (development)
$ git push origin main
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Lal44/gitflow-on-github.git
    1111716..dc7fab8  main -> main

lalba@LAPTOP-PHMY5VKC MINGW64 ~/lalbabu/gitflow-on-github (development)
$ git push origin development
Everything up-to-date


lalba@LAPTOP-PHMY5VKC MINGW64 ~/lalbabu/gitflow-on-github (development)





```



development had recent pushes 1 minute ago
 Compare & pull request


main

 3 Branches
 
 0 Tags

Add file
<> Code


Lal44 Merge branch 'hotfix/urgent-fix'
 dc7fab8 · 3 minutes ago
6 Commits

 README.md	Initial commit	1 hour ago
 feature_branch.txt	feature branch add	37 minutes ago
 release-fix.txt	release-fix	17 minutes ago
 urgent.txt	Add urgent.txt for hotfix	4 minutes ago

 README
